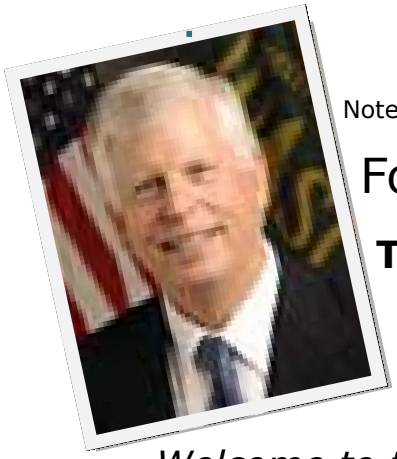
Chippewa National Forest

2011 Annual Report



Notes from the

Forest Service Chief's Office

Tom Tidwell

Welcome to the Forest Service

We are entrusted with 193 million acres of forests and grasslands. It's a big task, but one that we take seriously. We are dedicated to restore and enhance landscapes, protect and enhance water resources, develop climate change resiliency and help create jobs that will sustain communities.

Notes from the

Chippewa National Forest Supervisor

Darla Lenz

It has been a little over a year since I arrived on the Chippewa National Forest. I've had an exciting year and observed an impressive array of collaborative partnerships, community involvement, tribal consultation, and natural resource stewardship projects. An amazing amount of work is accomplished by our employees, volunteers, and our many partners.

An aspect of our work on the Chippewa that stood out for me in the last year is our many and varied partnerships. One measurement of the significance of partners to the Forest is the number of agreements we have in place. In 2011, the Forest had approximately 38 formal agreements. Each of these agreements brings a partner to the table that is able to leverage additional funding or contributions to accomplish priority work on the ground. We could not achieve our work without these very important partners.

The Resource Advisory Committee (RAC), which accomplished a great deal of work in 2011, was an excellent example of the high level of interest that our partners have in their local National Forest. The RAC itself is made up of 18 volunteers that represent a cross section of stakeholders. There were 41 projects submitted for funding and the RAC spent many, many hours reviewing proposals. Twentytwo? projects were selected and are now being implemented. The projects themselves range from invasive species control to fish passage improvements to campground rehabilitation- all very important work to the people we serve.

Land management professionals, including Chippewa employees, are engaged in understanding how climate change may affect the Northwoods in the future. A number of workshops were held in 2011 to build awareness of climate change. The Forest Service is partnering with others to develop a Climate Change Response Framework, a reference that will identify trends and provide tools to land managers to maintain our ecosystem's resilience. The Forest has developed some key objectives to reach in the next five years. See page x in this report.

A focus within the Forest Service continues to be adapting our internal culture to best meet the needs of present and future generations. In our rapidly changing and increasingly diverse Nation, to be effective in accomplishing our mission, we must better understand, represent, and reflect the diverse citizens we serve. To meet this need, Forest employees continue to network and outreach to our local communities, to the Leech Lake Band of Ojibwe, to our stakeholders, and to the public at large. We serve citizens in many ways: through our Forest programs, conservation education, agreements, recreational activities, economic opportunities, and more.

It has been a busy first year. 2012 brings a wealth of projects and challenges to the forefront. I look forward to working with you!

Payments to Counties

CHIPPEWA	PILT	Title I	SRS Title II	TOTAL
Cass	451,440	345,026	60,887	857,353
Itasca	444,435	450,396	79,481	974,312
Beltrami	86,924	95,930	16,928	199,782
TOTAL	982,799	891,352	157,296	2,031,447

SUPERIOR	PILT	Title I & III	SRS Title II	Thye-Blatnik	TOTAL
Cook	210,814	554,052	48,178	2,025,000	2,838,044
Koochiching	9,673	81	-0-	N/A	9,754
Lake	239,697	548,157	47,665	2,512,500	3,348,019
St. Louis	279,324	632,095	54,964	1,612,500	2,578,883
TOTAL	739,508	1,734,385	150,807	6,150,000	8,774,700

2011 Accomplishments

TIMBER

Harvested (Million Board Feet) 34,803

Reforestation (Acres) 1930.5

Timber Stand Improvement 1647.4

Fuelwood Permits ($20) 219

Christmas Tree Permits 166

Bough Permits 49

HUMAN RESOURCES

Senior Employment 20

Volunteers 255

Youth Conservation Corps 6

Full Time Employees 127

Summer Visitor Centers 15,000 visitors

Conservation Ed Programs 320

FIRE AND FUELS

Prescribed Burns (# Fires/Acres) 10 / 3,389

Wildfires (# Fires/Acres) 11/13

Hazardous Fuels Reduced (Acres) 1,227

Hazardous Fuels (non WFHF Acres) 5,869

WILDLIFE

Terrestrial Habitat Restored (Acres) 7089

Inland Streams Enhanced (Miles) 26

Inland Lakes Enhanced (Acres) 200

Soil Water Resource Improved (Acres) 152

LANDS

Right-Of-Way Cases 2

Special Use Permits (Total) 690

Land Acquisition (Acres) 0

Mineral Permits (Issued) 17

Total Nat'l Forest Acres 666,627

Boundary Management (Miles) 15

Total Acreage within Boundary 1,599,611

ROADS AND TRAILS

Road Maintenance (miles) 479.9

Road Improvement (miles) 53.9

Road Decommissioned (miles) 16.9

Trails Maintained to Standard (miles) 192

Climate Change

How will climate change affect tree diversity in northern Minnesota? What has been the trend in average monthly temperatures in northern Minnesota? Will earlier ice-outs on area lakes mean adjusting the summer camping season? These were just a few of the questions discussed at a Climate Change workshop hosted by the Chippewa National Forest and North Central Research Station in Grand Rapids.

In 2011, Chippewa National Forest employees gathered for a climate change workshop to train all staff on climate changes causes and impacts, the role of forests and grasslands and possible responses. By the end of the day, employees understood the potential contribution of their own work to climate change response.

Forest Supervisor Darla Lenz discussed the importance national forests play in responding to climate change. Researchers at the Northern Research Station in Grand Rapids gave presentations on climate change observations, as well as mechanisms, predictions and implications of the changing climate conditions for forest ecosystems. Other topics included climate change considerations for silviculture and aquatic systems.

Employees then met with researchers and discussed how the climate information directly impacts work on the National Forest. Each resource team developed action items on how to respond to future climate change and presented their "action plan" to the full conference.

Minnesota Climate Trends

Temperatures: Due to warmer conditions, there is a longer dryer growing season condition which leads to increased threat of wildfires, greater plant stress and altered pest behavior. Precipitation patterns change with more frequent storms with higher temps.

Species: Tree species on the decline include trembling aspen, balsam fir, eastern white pine, paper birch, northern red oak. Red maple and bur oak have remained stable.

Aquatic: Ice out dates are earlier, and walleye spawning occurs close to ice out. Increases for bluegill and bullheads. Wetlands and potholes are drier, leaving less waterfowl habitat.

Chippewa National Forest Climate Charter

The Forest's Climate Change Committee has developed a charter to outline action to reduce the Forest's environmental footprint over the next five years. In addition, the team will use the most recent science to identify actions to adapt our infrastructure and to make our forest ecosystems more resilient to the effects to climate change.

Resource Advisory Committee

The RAC funded projects in August 2011. Work now begins on RAC projects in timber, lakes, invasives, fire, and recreation.

Simpson Creek Bridge

Replace the aging Simpson Creek bridge, improve existing infrastructure and enhance fish habitat on Simpson Creek.

Tilly's Creek Culvert

Reduce periodic nutrient loading of Jessie Lake due to sediment transport. Replace culvert to restore natural stream flow volumes.

Pughole Lake Road Erosion

Re-grade, resurface and install storm water basins in road right-of-way to reduce and eliminate overland flow of stormwater and sedimentation from entering Pughole Lake.

Edge of the Wilderness Scenic Byway

Complete preliminary engineering projects necessary for road maintenance and reconstruction of Highway 38, Edge of the Wilderness Scenic Byway.

Trails Maintenance Equipment

Purchase winter trail maintenance equipment, in partnership with the Northern Lights Ski Club.

Forestwide Road Maintenance*

Provide road maintenance throughout the Chippewa National Forest if additional RAc funds remain.

Onigum Shoreline

Restore the old Onigum marina and beach to native species and healthy fishery habitat. Improve habitat through Leech Lake Band of Ojibwe and Onigum youth groups.

Six Mile Lake Fish Passage

Replace current concrete and wood dam with a series of rock riffles to provide continuous fish passage and reduce shoreline erosion.

Portage Lake Fish Passage

Re-establish fish passage between Portage and Leech lakes by managing Portage Lake at an elevation that reduces shoreline erosion while maintaining a healthy fishery.

Woodtick Creek Restoration

Restore a quarter mile of stream channel impacted by the current Woodtick Trail road alignment and cross-country ATV use through channel restoration and culvert installation.

Natures Lake Study

Restore hydrologic flows from Round and Nature's Lake, providing improved conditions for natural wild rice and habitat for ducks, fish, mammals.

Purple loosestrife Bio-Control

Reduces impacts by purple loose-strife on lakeshore riparian habitats within the Forest . Methods include biologic (beetles) and hand pulling.

Stony Point Garlic Mustard

Reduce the size of each garlic mustard infestation by hand pulling, mechanical treatment or through the use of an approved herbicide on second-year garlic mustard plants.

Wild Parsnip Reduction

Reduce seed production and population size of wild parsnip, a noxious weed. Manage roadsides along Co. Road 13 (Onigum and Stony Point).

Campground Site Repairs

Improve campground spurs and complete site leveling work on high priority campgrounds across the Forest. Additional funding will provide for campground repairs.

Boat Access Maintenance

Repair up to 34 boat accesses, currently managed by the Forest Service, to ensure public safety and protect water quality.

Trout Lake Trailhead

Reconstruction of the Joyce Estate historic wooden gate, and relocation of existing kiosk and barrier posts to reduce deferred maintenance and improve watershed health.

Resource Advisory Committee

The twenty-one RAC projects will benefit tourism and restore or maintain habitats in all three counties, prevent the spread of 4 invasive species and provide local jobs.

Wet Meadow Habitat Restoration

Restore large, wet sedge meadow communities via prescribed fire. Areas in Mud-Goose, Leech Lake River, Mississippi Rive,r Boy River, Federal Dam, White Oak, Laura Lake.

BlueberryRestoration

Restore blueberry habitat, reduce fuels, and restore fire dependent ecosystem status of pine stand utilizing prescribed fire or mechanical brushing on 1,000 acres.

Woodcock Improvement

Manage permanent wildlife openings through alder shearing toimprove woodcock habitat. Partnership with Woodcock MN and Ruffed Grouse Society.

Ladyslipper Scenic Byway

Sustain a population of 10,000 Lady's Sllppers along the Lady Slipper Scenic Byway after reconstruction of the road. Improve interpretation of orchids and habitat.

Riparian Forest Enhancement

Reestablish conifer component of riparian forest ecosystems where white pine, white spruce, balsam fire were common. Increase conifer and enhance riparian/wildlife

Record Discoveries

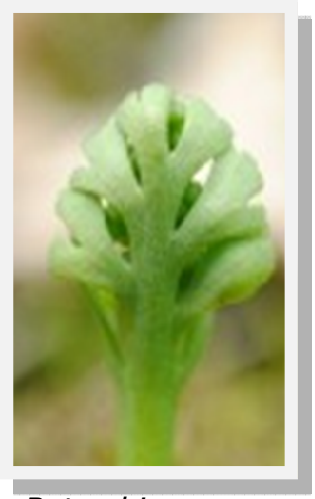
For ten years, the MIST team has been gathering data pertaining to Threatened, Endangered and Sensitive (TES) species on the Chippewa National Forest. The acronym "MIST" stands for Monitoring, Inventory and Survey Team. The team gathers information about TES species that is used to make assessments on forest management activities. Information on over 50 species of plants, birds, mammals, reptiles, insects, fish, and mollusks is collected each year.

Over the decade, the MIST team has had increasingly remarkable results finding locations of rare species. This has been no easy feat. In many cases, surveys require long days of crawling through brush or swamps searching for a plant or lichen that may be no bigger than a thimble. Crews have to know the habitat and often have only a week or two of the right conditions to find certain species.

Recently, the combination of GIS, years of field experience and careful examination of data have allowed the MIST team to refine their search areas. Between 2005 -2009, the average number of new records added per year was about 163. In 2010, the number rose to an amazing 330 new finds and jumped again in 2011 to a record 389 new TES locations for 28 species added to the Forest database. MIST data ensures that management activities can be implemented with the least impact to the species.

Confirming the locations of such a large number of rare species, and in some instances expanding their known ranges, has led to interactions with species experts from the University of Minnesota, the Minnesota State Herbarium at the Bell Museum, the University of Michigan and Iowa State University. Sharing information with these institutions help forest managers understand and protect these species.

Members of the team participate in forest inventory and heritage resource assessments. They complete impoundment management/maintenance inspections, survey for noxious weeds, produce habitat relationship predictive models for species, and maintain Forest corporate databases for rare species. In this way, MIST not only discovers new plant species, but new ways to support Chippewa National Forest management efforts.



Botrychium ascendens

…..and extremely rare finds

Triangleglobe Moonwort (Botrychium ascendens) was a significant find for the state because it apparently had not been found previously in Minnesota on a "natural" site.

Dainty Moonwort (Botrychium crenulatum) was a significant find across a larger area because it has never been found in North America east of the Rocky Mountains.

Spotted Felt Lichen (Sticta fuliginosa) is a rare lichen in Minnesota that apparently had never been found in Itasca county, and had not previously been reported on the Forest.

Careers in Silviculture

Silviculturists discuss black ash and the threats of Emerald Ash Borer at the 2010 Black Ash Symposium held on the Forest.

Through the years, the Chippewa National Forest has hosted a variety of silvicultural training. From black ash workshops to emerald ash borer and stewardship training, the Forest has welcomed many silviculturists to continually upgrade skills. The Forest has four certified silviculturists on staff, but what does it take to earn that designation? The certification program is rigorous, designed to ensure that Forest silviculturists have the knowledge, skills and abilities needed to perform the tasks associated with planning, implementing and monitoring forest vegetation management.

To be certified, candidates must first accumulate at least 36 months of professional resource management work experience. This may include vegetation inventory, environmental analysis, timber sale layout, timber sale administration, service contract preparation, prescribed fire, site preparation, reforestation, stand improvement and writing silvicultural prescriptions for approval by others.

Next, the silviculturist is expected to complete formal course work for a forestry degree, in-service training and/or instruction at the graduate school level in specific subject areas. A third step in the certification process includes completion of prescription examinations. The candidate must prepare, present and defend a certification prescription before a Regional Certfication Team. The presentation and defense of the prescription may be a three day process. Candidates must also complete a project paper to demonstrate their knowledge and experience with the practice of silviculture. This paper is reviewed by the Regional Certification Team. In total, these employees complete three years of training, study and field work to complete their certification.

Silviculturists today must consider management strategies that meet landscape scale management and changing climate conditions. They work in partnership with timber sale administrators, timber marking crews, NEPA Teams, biologists, and other agencies and private industry.

Travelling Highway 2

If you drive along Highway 2 though the Chippewa National Forest, you may see helicopters hovering over the road. The helicopter crews are part of the effort to connect a 68-mile 230 kilo volt (kV) transmission line between Bemidji and Grand Rapids, Minnesota.

The primary purpose of the Project was to improve long-term reliability of the local and regional transmission system. Ottertail Power, Minnesota Power and Minnkota Power obtained a national forest easement granting a 230 kV transmission line right-of-way across the Chippewa National Forest in October 2006.

Other cooperating agencies in the project included the U. S. Army Corps of Engineers, U.S. Fish and Wildlife, Leech Lake Band of Ojibwe, Minnesota DNR, MN Department of Transportation and Bureau of Indian Affairs. Federal and State Energy offices, including the MN Office of Energy Security, MN Public Utilities Commission and USDA Rural Utilities Service are also partners in the project.

Federal Agencies analyzed 3 alternatives which included a Northern route and two central corridor routes all impacting the Chippewa National Forest. One of the three alternatives impacted ongoing studies in the Pike Bay Experimental Forest. Two alternatives crossed treaty lands of the Leech Lake Band of Ojibwe. The Draft Environmental Impact Statement (DEIS) was published in the Federal Register on March 5, 2010. Public meetings and Contested Case Hearings were completed in April 2010 on the DEIS. An alternative was selected following the Highway 2 corridor in 2010.

Work began on the Transmission line in 2011 and included widening the existing corridor. Mitigation projects are in place to improve impacted sites. (See articles on next page.) Installation of the power poles through the corridor and stringing powerline was completed in April 2012. Mitigation project completion is expected by fall 2012.

Sweet Grass

In May 2011, students from the Bug-O-Nay-Ge-Shig school, an alternative school for Native American students in Bena, Minnesota, helped gather sweetgrass to establish a propagation program on the Chippewa National Forest.

Sweetgrass is an important plant for Anishinabe people, for a variety of medicinal and spiritual uses. There is great demand for sweetgrass among Native Americans wanting to reconnect with their traditional culture. Sweetgrass is well known for its sweet flavor and vanilla scent. Among other uses, strands of sweetgrass are woven into braids that are burned as incense.

The sweetgrass propagation project is funded by Ottertail Power as part of a mitigation program to replace traditional gathering opportunities that are affected by construction of the new 230 kV transmission line through the Leech Lake Reservation.

Students dug up seventy blocks of sod from alongside Turtle River Lake Road in Beltrami County on the Chippewa National Forest. Bug-O-Nay-Ge-Shig teacher John Parmenter and the Forest Botanist directed removal of the sweetgrass blocks. The blocks were transported to Camp Rabideau where the Rabideau Conservation and Learning Academy will propagate sweetgrass to be planted near local indian communities within the Leech Lake Reservation. It is hoped that Camp Rabideau will serve as a foundation for production of sweetgrass that will benefit tribes across Minnesota.

Other Mitigation Projects on the Forest

Maple Sugar Production Area: Managing a forested area for sugar maple through crop tree thinning. Improve the stand's potential for quality sugar maple syrup production. Project completed through partnership with Forest and Leech Lake Band of Ojibwe.

Wetland Restoration: Implement the removal of water impoundments to restore historical hydrology and associated pre-impoundment wetland plant communities. Projects are located in major watersheds of the Upper Mississippi River, Leech Lake River, or the Big Fork River.

Berry Patch Management: Enhance multiple species of fruiting shrubs and vines. Establish and maintain areas suitable for traditional harvesting of berries.

Blueberry Management: Intensive enhancement by brushing and/or prescribed burning to increase the sunlight reaching the forest floor to increase blueberry production.

Rebuilding road and culvert to restore wetland: Removal/ reconstruction of degraded forest road that impounds 45 acres of lowland conifer forest and six acres of open water .

Knutson Dam Gets Rocked

Volunteers came to the rescue when high water levels caused damage to the Knutson Dam fishing pier on the Chippewa National Forest.

The high water levels on Cass Lake and storms in the spring of 2011 caused shoreline erosion beneath the Knutson Dam fishing pier. The bank behind the pier was undercut by high water resulting in a series of sink holes along the back side of the pier. The loss of material was a maintenance issue for the dam and the sink holes created a safety issue for recreational users. The ground in the area was too soft to drive on so Forest Service staff could not bring in heavy equipment to do the repair.

By coincidence, the week the damage was discovered, there was a group from the Minneapolis-based Alpha Human Service Group camping at the Norway Beach Recreation Area for a week. The group had expressed interest in volunteer opportunities on the Forest, and on June 6, nineteen volunteers from the group began working at Knutson Dam.

A Chippewa National Forest Engineer, coordinated materials and tools for the project and supervised the work and site safety. The team hand-excavated a 75ft long x 2ft wide x 3ft deep trench along the west side of the pier where the erosion was occurring. They lined the trench with separation fabric and backfilled with crushed rock to stabilize the eroding bank and completed the entire project in an impressive 3 hours!

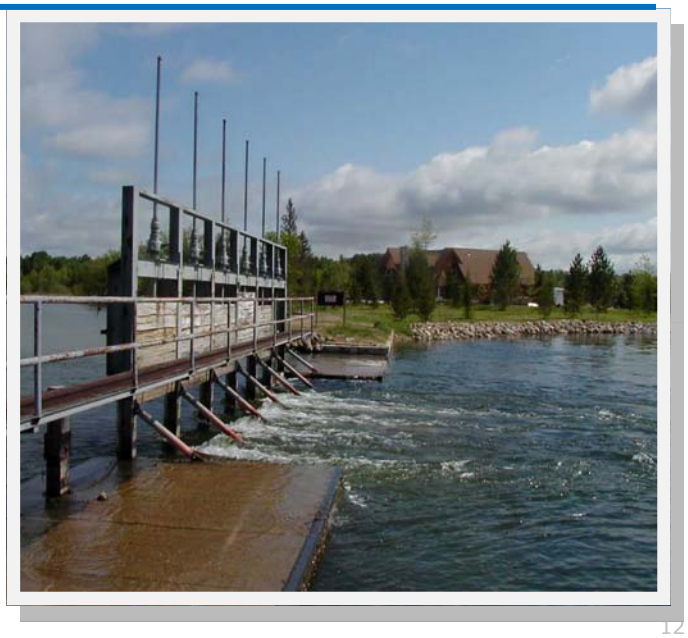
Knutson Dam was established as a logging dam in the 1890's, and was included as part of the congressionally-designated Forest Reserve that became Chippewa National Forest. Operation of a water control structure by the Forest Service is a unique responsibility.

Knutson Dam is one of three water control structures along the headwaters of the Mississippi River: The Lake Bemidji dam is operated by Ottertail Power Company, Knutson Dam by the Chippewa National Forest, and Lake Winnie Dam by the US Army Corps of Engineers.

Planning for Future

In August 2011, the Eastern Region dive team did an underwater inspection and condition review of Knutson Dam. The dam was rebuilt in 1926 as a fixed crest timber crib dam. Various modifications have been done over the years.

In 2011, inspectors made recommendations on six key areas at the dam including replacing stop logs and completing the planning process for eventual replacement of the timber cribbing. Planning for the future would include environmental, hydrological, hydraulics and soil analysis, flood routing, dam failure analysis and preliminary construction plans.



Chippewa National Forest

HOME

>Special Places

>Recreation

>Alerts and Notices

>Passes and Permits

>Maps and Publications

>Land and Resource Mgmt

>Learning Center

>Working Together

>About the Forest

>News and Events

CONTACT INFORMATION

Chippewa National Forest

200 Ash Ave NW

Cass Lake, MN 56633

218-335-8600

www.fs.usda.gov/chippewa

Surfing the Forest Web……

You can learn more about the Chippewa National Forest by logging into the Forest website—www.fs.usda.gov/chippewa

Our website has links to campground information and reservations, trail and campground maps, Forest NEPA comment deadlines and updates on Resource Advisory Committee projects. Visitor Center schedules are posted in the Learning Center.

Want to hear more of our stories? Check out the Success Story link on the Forest web! We have more than 100 stories on the web highlighting Forest projects and successes!